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October 6, 1989

Dr. George F. Cahill, Jr.  
Vice President for  
Scientific Training and Development  
Howard Hughes Medical Institute  
6701 Rockledge Drive  
Suite 900  
Bethesda, MD. 20817

Dear Dr. Cahill:

The Subcommittee on International Scientific Cooperation of the Committee on Science, Space, and Technology has scheduled a hearing on Thursday, October 19, 1989 to review plans for international cooperation in mapping the Human Genome. I am pleased to invite you to testify at the October 19th hearing, which will begin at 9:30 a.m. in Room 2325 of the Rayburn House Office Building.

The Subcommittee hearing will examine several areas with regard to the Human Genome mapping project. These will include: 1) the status of international efforts to map the Human Genome, 2) the appropriate level of international involvement and financial "burden-sharing" in the mapping effort, and 3) the implications of international cooperation on the U.S. scientific and industrial competitiveness.

Testimony from the hearing will be used to assess the need for new policies to promote international cooperation in mapping the Human Genome, while ensuring the ability of U.S. industry to compete effectively in the fields of biotechnology, pharmaceutical development and equipment manufacture.

In this regard, we would ask that, during your testimony, you address the following questions:

1. What are the potential benefits and costs of the Human Genome mapping project? What are the potential non-human spinoffs of the techniques and technology being developed?
2. How long will it take to sequence the Human Genome with international cooperation?, without international cooperation? Where is international cooperation essential to successfully map the Human Genome?
3. What is the mission and objectives of the Human Genome Organization (HUGO) regarding international cooperation? What is the status of HUGO's efforts? Is there a timetable for achieving HUGO's objectives?
4. Who are the current members of HUGO? How is the HUGO organization concept being received by foreign countries? What is the current level of funding?
5. How will HUGO assure that all countries involved will assume a fair share of the basic research underlying the Genome mapping effort (i.e., will the U.S. pay for the entire effort, while the rest of the world benefits?)
6. How will HUGO address competitive concerns such as sequencing technology, equal access to [foreign] data and intellectual property protection being addressed? Will there be any data restrictions by "foreign" or U.S. researchers? Will these restrictions impact international cooperation?
7. What current private sector resources are being directed toward the Genome mapping effort? Are these resources adequate?
8. What are the social and ethical issues raised by mapping the Human Genome? How will HUGO address these issues at an international level?
9. How is HUGO coordinating its efforts with the Department of Energy, the National Institutes of Health, foreign countries?
10. Do you see any need for legislation aimed at increasing international cooperation, ensuring U.S. competitiveness, or addressing ethical issues?

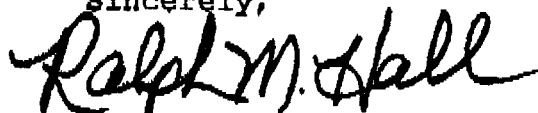
We ask that your oral testimony be limited to approximately ten to fifteen minutes to ensure that Members have sufficient time for questions following presentation of the statements. Your written statement may be of any length and will be included in its entirety in the published hearing record. You also may be asked during the hearing to respond to additional written questions for inclusion in the record.

Please be advised that under Committee rules, the proceedings of the hearing will be printed strictly in verbatim form. The testimony will be published as delivered: only typographical and transcriptional errors will be edited in the transcript.

In preparation for the hearing, thirty copies of your prepared statement should be forwarded to the Subcommittee on International Scientific Cooperation, Room 822, House Annex #1, Washington, D.C. 20515, at least 48 hours before the hearing. In addition, fifty copies should be delivered to Room 2325 at least thirty minutes before the hearing for distribution to the public and the press.

If you have any questions, please do not hesitate to contact Bob Palmer or Chuck McElyea, at (202) 226-3636.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ralph M. Hall". The signature is fluid and cursive, with the first name "Ralph" being the most prominent part.

RALPH M. HALL, Chairman  
Subcommittee on International  
Scientific Cooperation